

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-25 (canceled)

1 Claim 26 (new): A telecommunications radio system for mobile  
2 communication services comprising a first base station  
3 having a plurality of antennas and located at a site, the  
4 base station covering an area subdivided into a multitude of  
5 sectors by the antennas, wherein:

6 the site comprises a structure with a height of at  
7 least 50m from erection ground;

8 the base station is located on the site at a height of  
9 at least 50m from erection ground; and

10 at least two of the antennas are arranged in a first  
11 ring situated in a first plane orthogonal to and concentric  
12 with a longitudinal axis of the site.

1 Claim 27 (new): The telecommunications radio system recited  
2 in claim 26 wherein the height of the site is in the range  
3 of 90m to 320m from the erection ground and the base station  
4 is located on the site at a height in the range of 90m to  
5 320m from the erection ground.

1 Claim 28 (new): The telecommunications radio system recited  
2 in claim 27 wherein each of said sectors is served by a  
3 separate one of the antennas.

1 Claim 29 (new): The telecommunications radio system recited  
2 in claim 27 wherein at least one of the antennas is a phase-  
3 controlled antenna.

1 Claim 30 (new): The telecommunications radio system recited  
2 in claim 29 wherein the multitude of sectors comprises six  
3 sectors.

1 Claim 31 (new): The telecommunications radio system recited  
2 in claim 29 wherein the multitude of sectors comprises 12  
3 sectors.

1 Claim 32 (new): The telecommunications radio system recited  
2 in claim 29 wherein the multitude of sectors comprises 24  
3 sectors.

1 Claim 33 (new): The telecommunications radio system recited  
2 in claim 29 wherein the multitude of sectors comprises 48  
3 sectors.

1 Claim 34 (new): The telecommunications radio system recited  
2 in claim 26 wherein at least one of the antennas is arranged  
3 in a second ring situated in a second plane orthogonal to  
4 and concentric with the longitudinal axis of the site, the  
5 second ring having a larger diameter than the first ring.

1 Claim 35 (new): The telecommunications radio system recited  
2 in claim 34 in which the first plane is the same as the  
3 second plane.

1 Claim 36 (new): The telecommunications radio system recited  
2 in claim 35 wherein a number of the antennas on the second  
3 ring is larger than a number of the antennas on the first  
4 ring.

1 Claim 37 (new): The telecommunications radio system recited  
2 in claim 36 wherein at least one of the antennas on the  
3 second ring has a horizontal angular range that is smaller  
4 than a horizontal angular range of the antennas on the first  
5 ring.

1 Claim 38 (new): The telecommunications radio system recited  
2 in claim 37 wherein at least one of the antennas on the  
3 first ring has a vertical aperture angle in the range of 8  
4 to 12 degrees.

1 Claim 39 (new): The telecommunications radio system recited  
2 in claim 37 wherein the at least one antenna on the second  
3 ring has a vertical aperture angle in the range of 3 to 6.5  
4 degrees.

1 Claim 40 (new): The telecommunications radio system recited  
2 in claim 37 wherein the area is subdivided into 24 sectors  
3 by the antennas on the first ring and 72 sectors by the  
4 antennas on the second ring.

1 Claim 41 (new): The telecommunications radio system recited  
2 in claim 37 wherein shape and/or size of one or more of the  
3 sectors can be changed by switching on or off one or more of  
4 the antennas.

1 Claim 42 (new): The telecommunications radio system recited  
2 in claim 37 wherein the shape and/or size of one or more of  
3 the sectors can be changed by changing the horizontal  
4 angular range of one or more of the antennas.

1 Claim 43 (new): The telecommunications radio system recited  
2 in claim 37 wherein shape and/or size of one or more of the  
3 sectors can be changed by changing the vertical aperture  
4 angle of one or more of the antennas.

1 Claim 44 (new): The telecommunications radio system recited  
2 in claim 37 wherein at least one of the antennas is arranged  
3 in a third plane orthogonal to the longitudinal axis of the  
4 site so as to cover an area in a proximity zone of the site,  
5 the third plane being located below a height of 50m from the  
6 erection ground.

1 Claim 45 (new): The telecommunications radio system recited  
2 in claim 37 wherein a total number of sectors needed to  
3 cover the area is a function of a size of each of said  
4 sectors and a required field strength in said each sector.

1 Claim 46 (new): The telecommunications radio system recited  
2 in claim 37 in which all of the antennas operate at one  
3 frequency.

1 Claim 47 (new): The telecommunications radio system recited  
2 in claim 46 wherein a second base station operating at a  
3 different frequency, from said one frequency, is situated  
4 within the area.

1 Claim 48 (new): A base station for use in a  
2 telecommunications radio system, the base station having a  
3 plurality of antennas and located at a site, the base  
4 station covering an area subdivided into a multitude of  
5 sectors by the antennas, wherein:

6 the site comprises a structure with a height of at  
7 least 50m from erection ground;

8 the base station is located on the site at a height of  
9 at least 50m from erection ground; and

10 at least two of the antennas are arranged in a ring  
11 situated in a plane orthogonal to and concentric with a  
12 longitudinal axis of the site.

1 Claim 49 (new): An antenna for use in a base station in a  
2 telecommunications radio system for mobile communication  
3 services, the base station being located at a site, the base  
4 station covering an area subdivided into a multitude of  
5 sectors with at least one of the sectors being served by the  
6 antenna, wherein:

7 the site comprises a structure with a height of at  
8 least 50m from erection ground;

9 the base station is located on the site at a height of  
10 at least 50m from erection ground; and

11 the antenna and at least one other antenna are arranged  
12 in a ring situated in a plane orthogonal to and concentric  
13 with a longitudinal axis of the site.

1 Claim 50 (new): A mobile network comprising a  
2 telecommunications radio system for mobile communication  
3 services, the system having at least one base station, the  
4 base station having a plurality of antennas, the base  
5 station being located at a site and covering an area

6 subdivided into a multitude of sectors by the antennas,  
7 wherein:

8 the site comprises a structure having a height of at  
9 least 50m from erection ground;

10 the base station is located on the site at a height of  
11 at least 50m from the erection ground; and

12 at least two of the antennas are arranged in a ring  
13 situated in a plane orthogonal to and concentric with a  
14 longitudinal axis of the site.